

CLAIMS

1 A compound corresponding to the following general formula:

5 nitrogen-containing aromatic ring – (NR<sub>3</sub>)<sub>p</sub> – (CO)<sub>n</sub>- distribution agent  
– (CO)<sub>m</sub> – (NR'<sub>3</sub>)<sub>q</sub> – aromatic or non-aromatic ring

wherein

n, m, p and q are identical or different and are integers 0 or 1; and

wherein

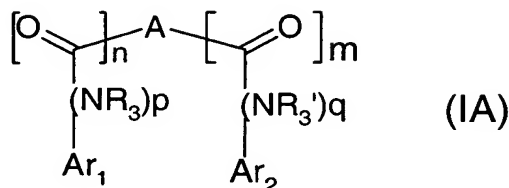
- 10 • the nitrogen-containing aromatic ring is:
- ◇ a quinoline optionally substituted with at least
    - one group N(Ra)(Rb) in which Ra and Rb, are identical or different, and are independently of each other hydrogen or a C1-C4 alkyl; or
    - 15 - one C1-C4 alkyl or alkoxy;
  - ◇ a quinoline possessing a nitrogen atom in quaternary form;
  - ◇ a benzamidine; or
  - ◇ a pyridine;
- 20 • the aromatic or non-aromatic ring is:
- ◇ a quinoline optionally substituted with at least
    - one group N(Ra)(Rb) in which Ra and Rb, are identical or different, and are independently
    - 25 - one C1-C4 alkyl or alkoxy;
  - ◇ a quinoline possessing a nitrogen atom in quaternary form;
  - ◇ a benzamidine;
  - ◇ a pyridine;
  - 30 ◇ a phenyl optionally substituted with halogen, C1-C4 alkoxy, cyano, carbonylamino optionally substituted with one or more C1-C4 alkyl, guanyl, C1-C4 alkylthio, amino,

- C1-C4 alkylamino, C1-C4 dialkylamino, nitro, C1-C4 alkyleneamino or C2-C4 alkenyleneamino; or
- 5     ◇ a mono- or bi- or tricyclic aromatic or non-aromatic heterocyclic nucleus containing 0 to 2 heteroatoms per ring provided that at least one heteroatom is present in at least one ring optionally substituted with one or more C1-C4 alkyl, C1-C4 alkylene or C2-C4 alkenylene;
- 10     •  $R_3$  and  $R'_3$ , which are identical or different, represent independently of each other hydrogen or C1-C4 alkyl;
- 15     • the distribution agent is:
- 15     ◇ a triazine group optionally substituted with one or more radicals chosen from halogen, C1-C4 alkyl, and thio, oxy or amino which are themselves optionally substituted with one or more C1-C4 alkyl;
- 15     ◇ a 5- or 6-membered heterocyclic radical containing a sulfur, oxygen or nitrogen atom;
- 20     ◇ a phenyl, -NH-phenyl-NH-, -NH-phenyle-CH<sub>2</sub>-NH-, -NH-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-NH-, -NH-CH<sub>2</sub>-phenyl-NH-, -CH<sub>2</sub>-phenyl-CH<sub>2</sub>-, -CH<sub>2</sub>-phenyl, -phenyl-CH<sub>2</sub>-, -CH<sub>2</sub>-thienyl-, -thienyl-CH<sub>2</sub>-, or -CH=CH-; or
- 25     ◇ a diazine group; and wherein the heterocyclic, phenyl, -NH-phenyl-NH-, -NH-phenyl-CH<sub>2</sub>-NH-, -NH-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-NH-, -NH-CH<sub>2</sub>-phenyl-NH-, -CH<sub>2</sub>-phenyl-CH<sub>2</sub>-, -CH<sub>2</sub>-phenyl, -phenyl-CH<sub>2</sub>-, -CH<sub>2</sub>-thienyl-, -thienyl-CH<sub>2</sub>-, -CH=CH-, and diazine are optionally substituted with the same groups as the triazine;
- or an isomer, an enantiomer, a diastereoisomer or a mixture thereof, or a pharmaceutically acceptable salt thereof;
- with the proviso that:
- 30     when the distribution agent is phenyl optionally substituted with NH<sub>2</sub>, and when n, m, p and q are each 1 and  $R_3$  and  $R'_3$  are hydrogen, then the nitrogen-containing aromatic ring and the aromatic ring are not both quinoline which is unsubstituted or substituted on its nitrogen atom with C1-C4 alkyl; and

when the distribution agent is a triazine and both p and q are 1, then both n and m are not 0.

- 2      The compound according to claim 1 which binds the G-quadruplex structure of telomeres.
- 5      3      The compound according to claim 1 wherein the distribution agent is chosen from the heterocyclic group, phenyl, -NH-phenyl-NH-, -NH-phenyl-CH<sub>2</sub>-NH-, -NH-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-NH-, -NH-CH<sub>2</sub>-phenyl-NH-, -CH<sub>2</sub>-phenyl-CH<sub>2</sub>-, -CH<sub>2</sub>-phenyl, -phenyl-CH<sub>2</sub>-, -CH<sub>2</sub>-thienyl-, -thienyl-CH<sub>2</sub>-, -CH=CH- and diazine.
- 10     4      The compound according to claim 1 wherein the distribution agent is chosen from the heterocyclic group, the phenyl, -NH-phenyl-NH-, -NH-phenyl-CH<sub>2</sub>-NH-, -NH-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-NH-, -CH<sub>2</sub>-phenyl-CH<sub>2</sub>-, -CH<sub>2</sub>-phenyl, -CH<sub>2</sub>-thienyl-, -CH=CH-, and diazine.
- 15     5      The compound according to claim 1 wherein the distribution agent is chosen from the heterocyclic group, the phenyl, -NH-phenyl-NH-, -NH-phenyl-CH<sub>2</sub>-NH-, -NH-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-NH-, -CH<sub>2</sub>-phenyl-CH<sub>2</sub>-, -CH=CH-, and diazine.
- 20     6      The compound according to claim 1 wherein the distribution agent is chosen from the heterocyclic group, the phenyl, -NH-phenyl-NH-, -NH-phenyl-CH<sub>2</sub>-NH-, -NH-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-NH- and diazine.
- 7      The compound according to claim 1 wherein the distribution agent is thienyl or pyridyl.
- 25     8      The compound according to claim 1 wherein the distribution agent is chosen from thienyl, pyridyl, phenyl, -NH-phenyl-NH-, -NH-phenyl-CH<sub>2</sub>-NH-, -NH-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-NH- and diazine.
- 9      The compound according to claim 1 wherein the diazine group is a pyrimidine.
- 10     The compound according to claim 1 wherein p and q are 1.

11 The compound according to claim 1 having the following formula (IA) :



5 wherein

n, m, p and q are identical or different and are integers 0 or 1;

• A represents:

◇ a 5- to 6-membered heterocyclic radical containing a sulfur, oxygen or nitrogen atom;

10 ◇ a phenyl, -NH-phenyl-NH-, -NH-phenyl-CH<sub>2</sub>-NH-,  
-NH-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-NH-, -NH-CH<sub>2</sub>-phenyl-NH-,  
-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-, -CH<sub>2</sub>-phenyl, -phenyl-CH<sub>2</sub>-, -CH<sub>2</sub>-thienyl-,  
-thienyl-CH<sub>2</sub>- or -CH=CH-; or

◇ a diazine group; and wherein

15 the heterocyclic, phenyl, -NH-phenyl-NH-, -NH-phenyl-CH<sub>2</sub>-NH-,  
-NH-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-NH-, -NH-CH<sub>2</sub>-phenyl-NH-, -CH<sub>2</sub>-phenyl-  
CH<sub>2</sub>-, -CH<sub>2</sub>-phenyl, -phenyl-CH<sub>2</sub>-, -CH<sub>2</sub>-thienyl-, -thienyl-CH<sub>2</sub>-,  
-CH=CH-, and diazine are optionally substituted with one or more  
20 radicals chosen from halogen, C<sub>1</sub>-C<sub>4</sub> alkyl, and thio, oxy or amino  
which are themselves optionally substituted with one or more C<sub>1</sub>-C<sub>4</sub>  
alkyl;

- R<sub>3</sub> and R'<sub>3</sub>, which are identical or different, represent independently  
of each other hydrogen or C<sub>1</sub>-C<sub>4</sub> alkyl;

- Ar<sub>1</sub> and Ar<sub>2</sub>, which are identical or different, and are independently of  
25 each other selected from:

• a quinoline optionally substituted with at least  
- a group N(Ra)(Rb) in which Ra and Rb are identical  
or different, and are independently of each other  
hydrogen or a C<sub>1</sub>-C<sub>4</sub> alkyl; or

30 - a C<sub>1</sub>-C<sub>4</sub> alkyl or alkoxy;

• a quinoline possessing a nitrogen atom in quaternary

form;

- a benzamidine;
- a pyridine optionally attached at the 4-position or fused with an aryl or heteroaryl group, optionally substituted with a C1-C4 alkyl;
- a phenyl optionally substituted with halogen, C1-C4 alkoxy, cyano, carbonylamino optionally substituted with one or more C1-C4 alkyl, guanyl, C1-C4 alkylthio, amino, C1-C4 alkylamino, C1-C4 dialkylamino, nitro, C1-C4 alkyleneamino or C2-C4 alkenyleneamino; or
- a mono- or bi- or tricyclic aromatic or non-aromatic heterocyclic ring containing 0 to 2 heteroatoms per ring provided that at least one heteroatom is present in at least one ring optionally substituted with one or more C1-C4 alkyl, C1-C4 alkylene or C2-C4 alkenylene;

or an isomer, an enantiomer, a diastereoisomer or a mixture thereof, or a pharmaceutically acceptable salt thereof;

with the proviso that:

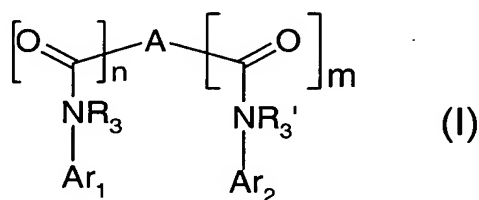
when A is phenyl optionally substituted with NH<sub>2</sub> and when n, m, p and q are each 1 and R<sub>3</sub> and R<sub>3</sub>' are hydrogen, then Ar<sub>1</sub> and Ar<sub>2</sub> are not both quinoline which is unsubstituted or substituted on its nitrogen atom with C1-C4 alkyl; and

when A is a triazine, and both p and q are 1, then both n and m are not 0.

12 The compound according to claim 11 wherein A is chosen from heterocyclic group, phenyl, -NH-phenyl-NH-, -NH-phenyl-CH<sub>2</sub>-NH-, -NH-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-NH-, -NH-CH<sub>2</sub>-phenyl-NH-, -CH<sub>2</sub>-phenyl-CH<sub>2</sub>-, -CH<sub>2</sub>-phenyl-, -phenyl-CH<sub>2</sub>-, -CH<sub>2</sub>-thienyl-, -thienyl-CH<sub>2</sub>-, -CH=CH- and pyrimidine.

13 The compound according to claim 11 wherein A is chosen from heterocyclic group, phenyl, -NH-phenyl-NH-, -NH-phenyl-CH<sub>2</sub>-NH-, -NH-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-NH-, -CH<sub>2</sub>-phenyl-CH<sub>2</sub>-, -CH<sub>2</sub>-phenyl-, -CH<sub>2</sub>-thienyl-, -CH=CH- and pyrimidine.

- 14 The compound according to claim 11 wherein A is chosen from heterocyclic group, phenyl, -NH-phenyl-NH-, -NH-phenyl-CH<sub>2</sub>-NH-, -NH-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-NH-, -CH<sub>2</sub>-phenyl-CH<sub>2</sub>-, -CH=CH- and pyrimidine.
- 5 15 The compound according to claim 11 wherein the diazine group which A may represent is pyrimidine.
- 16 The compound according to claim 1 having the following formula (I) :



10

wherein

n and m are identical or different and are integers 0 or 1;

- A represents:

15

- ◊ a 5- to 6-membered heterocyclic radical containing a sulfur, oxygen or nitrogen atom;

- ◊ a phenyl, -NH-phenyl-NH-, -NH-phenyl-CH<sub>2</sub>-NH- or -NH-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-NH-; or

20

- ◊ a diazine group; and wherein the heterocyclic, phenyl, -NH-phenyl-NH-, -NH-phenyl-CH<sub>2</sub>-NH-, -NH-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-NH-, and diazine are optionally substituted with one or more radicals chosen from halogen, C1-C4 alkyl, and thio, oxy or amino which are themselves optionally substituted with one or more C1-C4 alkyl;

25

- R<sub>3</sub> and R'<sub>3</sub>, which are identical or different, represent independently of each other hydrogen or C1-C4 alkyl;

- Ar<sub>1</sub> and Ar<sub>2</sub>, which are identical or different, and are independently of each other selected from :

30

- a quinoline optionally substituted with at least
    - a group N(Ra)(Rb) in which Ra and Rb are identical or different, and are independently of each other

hydrogen or a C1-C4 alkyl; or

- a C1-C4 alkyl or alkoxy;

- a quinoline possessing a nitrogen atom in quaternary form;
- 5      • a benzamidine;
- a pyridine optionally attached at the 4-position or fused with an aryl or heteroaryl group; optionally substituted with a C1-C4 alkyl;
- 10      • a phenyl optionally substituted with halogen, C1-C4 alkoxy, cyano, carbonylamino optionally substituted with one or more C1-C4 alkyl, guanyl, C1-C4 alkylthio, amino, C1-C4 alkylamino, C1-C4 dialkylamino, nitro, C1-C4 alkyleneamino or C2-C4 alkenyleneamino; or
- 15      • a mono- or bi- or tricyclic aromatic or non-aromatic heterocyclic ring containing 0 to 2 heteroatoms per ring provided that at least one heteroatom is present in at least one ring optionally substituted with one or more C1-C4 alkyl, C1-C4 alkylene or C2-C4 alkenylene;
- or an isomer, an enantiomer, a diastereoisomer or a mixture thereof,
- 20      or a pharmaceutically acceptable salt thereof;

with the proviso that:

- when A is phenyl optionally substituted with NH<sub>2</sub> and when n and m are 1 and R<sub>3</sub> and R<sub>3</sub>' are hydrogen, then Ar<sub>1</sub> and Ar<sub>2</sub> are not both quinoline which is unsubstituted or substituted on its nitrogen atom with C1-C4 alkyl.
- 25

17      The compound according to claim 16 wherein A is chosen from thienyl, pyridyl, phenyl, -NH-phenyl-NH-, -NH-phenyl-CH<sub>2</sub>-NH-, -NH-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-NH- and pyrimidine.

18      The compound according to claim 16 wherein p and q are 1.

30

19      The compound according to claim 16 wherein Ar<sub>1</sub> and Ar<sub>2</sub> represent:

- a quinoline optionally substituted with at least
  - a group N(Ra)(Rb) in which Ra and Rb are identical

or different, and are independently of each other hydrogen or C1-C4 alkyl; or

- a C1-C4 alkyl or alkoxy;

5

- a quinoline possessing a nitrogen atom in quaternary form; or
- pyridine.

20 The compound according to claim 16 wherein Ar<sub>1</sub> and Ar<sub>2</sub> are chosen from the following groups: 4-amino-, 4-methylamino-, 4-dimethylamino- or 4-alkoxy-quinolyl or -quinolinium in which the  
10 quinolinium is optionally substituted with one or two methyl groups.

21 The compound according to claim 16 wherein A is optionally substituted with one or more radicals chosen from halogen, C1-C4 thioalkyl, amino, C1-C4 alkylamino or C1-C4 dialkylamino.

15 22 The compound according to claim 16 wherein A is optionally substituted with methylthio or halogen.

23 The compound according to claim 1 wherein the compound is having a telomerase inhibiting activity.

20 24 The compound according to claim 1 wherein the compound is having an anticancer activity.

25 The compound of formula (IA) according to claim 11 wherein:  
n, m, p and q are identical or different and are integers 0 or 1;

- A represents:

- ◇ thienyl or pyridyl;
- 25 ◇ phenyl, -NH-phenyl-NH-, -NH-phenyl-CH<sub>2</sub>-NH-, -NH-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-NH-, -CH<sub>2</sub>-phenyl-CH<sub>2</sub>- or -CH=CH-; or
- ◇ pyrimidyl optionally substituted with one or more radicals chosen from halogen or C1-C4 alkylthio;
- R<sub>3</sub> and R'<sub>3</sub>, which are identical or different, represent independently  
30 of each other hydrogen or C1-C4 alkyl;
- Ar<sub>1</sub> and Ar<sub>2</sub>, which are identical or different, and are independently of each other selected from :

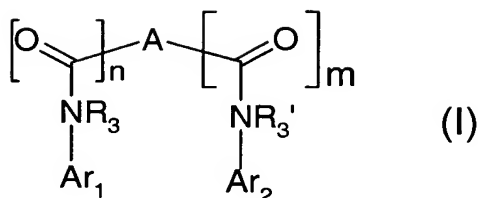


- a quinoline optionally substituted with at least
    - a group N(Ra)(Rb) in which Ra and Rb are identical or different, and are independently of each other hydrogen or C1-C4 alkyl; or
    - 5                   - a C1-C4 alkyl or alkoxy;
  - a quinoline possessing a nitrogen atom in quaternary form;
  - a pyridyl; or
  - a mono- or bi- or tricyclic aromatic or non-aromatic heterocyclic ring containing 0 to 2 heteroatoms per ring provided that at least one heteroatom is present in at least one ring optionally substituted with one or more C1-C4 alkyl, C1-C4 alkylene or C2-C4 alkenylene;
  - 10                   or an isomer, an enantiomer, a diastereoisomer or a mixture thereof, or a pharmaceutically acceptable salt thereof.
- 15
- 26   The compound of formula (IA) according to claim 11 wherein:
- n and m are identical or different and are integers 0 or 1, and p and q are 1;
  - A represents:
    - 20                   ◊ thienyl or pyridyl;
    - ◊ phenyl, -NH-phenyl-NH-, -NH-phenyl-CH<sub>2</sub>-NH- or -NH-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-NH-; or
    - ◊ pyrimidyl optionally substituted with one or more radicals chosen from halogen or C1-C4 alkylthio;
    - 25                   - R<sub>3</sub> and R'<sub>3</sub>, which are identical or different, represent independently of each other hydrogen or C1-C4 alkyl;
    - Ar<sub>1</sub> and Ar<sub>2</sub>, which are identical or different, and are independently of each other selected from :
      - a quinoline optionally substituted with at least
      - 30                   - a group N(Ra)(Rb) in which Ra and Rb, which are identical or different, and are independently of each other hydrogen or C1-C4 alkyl; or
      - a C1-C4 alkyl or alkoxy;
      - a quinoline possessing a nitrogen atom in quaternary

- form;
- a pyridyl; or
  - a mono- or bi- or tricyclic aromatic or non-aromatic heterocyclic ring containing 0 to 2 heteroatoms per ring provided that at least one heteroatom is present in at least one ring optionally substituted with one or more C1-C4 alkyl, C1-C4 alkylene or C2-C4 alkenylene; or an isomer, an enantiomer, a diastereoisomer or a mixture thereof, or a pharmaceutically acceptable salt thereof.
- 5
- 10 27 The compound according to claim 26 wherein Ar<sub>1</sub> and Ar<sub>2</sub>, which are identical or different, and are independently of each other chosen from the 4-amino-, 4-methylamino-, 4-dimethylamino- or 4-alkoxy-quinolyl or -quinolinium groups in which the quinolinium is optionally substituted with one or two methyl groups.
- 15 28 The compound according to claim 26 wherein R<sub>3</sub> and R<sub>3</sub>' represent hydrogen.
- 29 The compound according to claim 26 wherein :
1. Ar<sub>1</sub> represents :
- a quinoline substituted with at least
    - one group N(Ra)(Rb) in which Ra and Rb are identical or different, and are independently of each other hydrogen or C1-C4 alkyl; or
    - a C1-C4 alkyl or alkoxy;
  - a quinoline possessing a nitrogen atom in quaternary form; and
- 20
- 25 2. Ar<sub>2</sub> represents
- a quinoline substituted with at least
    - one group N(Ra)(Rb) in which Ra and Rb are identical or different, and are independently of each other hydrogen or C1-C4 alkyl; or
    - a C1-C4 alkyl or alkoxy;
  - a quinoline possessing a nitrogen atom in quaternary
- 30

- form;
- a pyridyl;
  - quinoline, benzimidazole, indole, benzothiophene, benzofuran, benzothiazole, benzoxazole, carbazole, quinazoline, quinoxaline, piperidyl, piperazinyl, morpholino, azepine and diaza-azepine, which are optionally substituted by one or more C1-C4 alkyl, C1-C4 alkylene or C2-C4 alkenylene;
- or an isomer, an enantiomer, a diastereoisomer or a mixture thereof, or a pharmaceutically acceptable salt thereof.
- 30 The compound of formula (IA) according to claim 11 chosen from :
- bis[(4-methoxy-2-methylquinolin-6-yl)-amido]-2,5-thiophenedicarboxylic acid;
  - bis[(4-dimethylamino-2-methylquinolin-6-yl)-amido]-2,5-thiophenedicarboxylic acid;
  - bis[(4-amino-2-methylquinolin-6-yl)-amido]-2,5-thiophenedicarboxylic acid;
  - N,N'-bis(4-amino-2-methylquinolin-6-yl)isophthalamide;
  - N,N'-bis(4-dimethylamino-2-methylquinolin-6-yl)terephthalamide;
  - 1-(4-methoxy-2-methylquinolin-6-yl)-3-{3-[3-(4-methoxy-2-methylquinolin-6-yl)ureido]phenyl}urea;
  - 1-(4-dimethylamino-2-methylquinolin-6-yl)-3-{4-[3-(4-dimethylamino-2-methylquinolin-6-yl)ureido]phenyl}urea;
  - N,N'-bis(4-amino-2-methyl-6-quinolyl)-2,4-diamino-6-chloro-5-methylsulfanylpurine;
  - bis[(4-amino-2-methylquinolin-6-yl)-amido]-2,5-pyridinedicarboxylic acid hydrochloride;
  - bis[(4-amino-2-methylquinolin-6-yl)-amido]-2,5-pyridinedicarboxylic acid;
  - N,N'-bis(4-dimethylamino-2-methylquinolin-6-yl)-but-2-enediamide;
  - bis[(4-dimethylamino-2-methylquinolin-6-yl)-amido]-2,5-pyridinedicarboxylic acid;
  - bis[(4-dimethylamino-2-methylquinolin-6-yl)-amido]-2,4-pyridinedicarboxylic acid;
  - N,N'-bis(4-dimethylamino-2-methylquinolin-6-yl)-1,4-

- phenylenediacetamide;
- bis[(4-amino-2-methylquinolin-6-yl)-amido]-2,6-pyridinedicarboxylic acid hydrochloride;
  - bis[(4-amino-2-methylquinolin-6-yl)amido]-2,6-pyridine dicarboxylic acid;
  - bis[(4-dimethylamino-2-methylquinolin-6-yl)amido]-2,6-pyridinedicarboxylic acid hydrochloride; and
  - bis[(4-dimethylamino-2-methylquinolin-6-yl)-amido]-2,6-pyridinedicarboxylic acid;
- or an isomer, an enantiomer, a diastereoisomer or a mixture thereof, or a pharmaceutically acceptable salt thereof..
- The compound according to claim 30 chosen from :
- bis[(4-dimethylamino-2-methylquinolin-6-yl)-amido]-2,5-thiophenedicarboxylic acid;
  - N,N'-bis-(4-amino-2-methylquinolin-6-yl)isophthalamide;
  - 1-(4-dimethylamino-2-methylquinolin-6-yl)-3-{4-[3-(4-dimethylamino-2-methylquinolin-6-yl)ureido]phenyl}urea;
  - N,N'-bis(4-amino-2-methyl-6-quinolyl)-2,4-diamino-6-chloro-5-methylsulfanylpurine;
  - bis[(4-amino-2-methylquinolin-6-yl)-amido]-2,5-pyridinedicarboxylic acid hydrochloride;
  - bis[(4-amino-2-methylquinolin-6-yl)-amido]-2,5-pyridinedicarboxylic acid;
  - bis-[(4-dimethylamino-2-methylquinolin-6-yl)-amido]-2,5-pyridinedicarboxylic acid; and
  - bis[(4-dimethylamino-2-methylquinolin-6-yl)amido]-2,4-pyridinedicarboxylic acid;
- or an isomer, an enantiomer, a diastereoisomer or a mixture thereof, or a pharmaceutically acceptable salt thereof..
- A pharmaceutical composition comprising therapeutically effective amount of a compound of formula (I) in combination with a pharmaceutically acceptable carrier ;

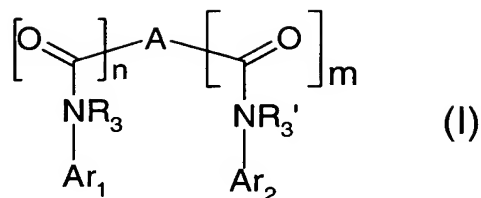


wherein

n and m are identical or different and are integers 0 or 1;

- 5        • A represents:
- ♦ a 5- to 6-membered heterocyclic radical containing a sulfur, oxygen or nitrogen atom;
- ♦ a phenyl, -NH-phenyl-NH-, -NH-phenyl-CH<sub>2</sub>-NH- or -NH-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-NH-; or
- 10        ♦ a diazine group; and wherein
- the heterocyclic, phenyl, -NH-phenyl-NH-, -NH-phenyl-CH<sub>2</sub>-NH-, -NH-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-NH-, and diazine are optionally substituted with one or more radicals chosen from halogen, C1-C4 alkyl, and thio, oxy or amino which are themselves optionally substituted with
- 15        one or more C1-C4 alkyl;
- R<sub>3</sub> and R<sub>3'</sub>, which are identical or different, represent independently of each other hydrogen or C1-C4 alkyl;
- Ar<sub>1</sub> and Ar<sub>2</sub>, which are identical or different, and are independently of each other selected from :
- 20        • a quinoline optionally substituted with at least
- a group N(Ra)(Rb) in which Ra and Rb are identical or different, and are independently of each other hydrogen or a C1-C4 alkyl; or
- a C1-C4 alkyl or alkoxy;
- 25        • a quinoline possessing a nitrogen atom in quaternary form;
- a benzamidine;
- a pyridine optionally attached at the 4-position or fused with an aryl or heteroaryl group, optionally substituted
- 30        with a C1-C4 alkyl;
- a phenyl optionally substituted with halogen, C1-C4 alkoxy, cyano, carbonylamino optionally substituted with

- one or more C1-C4 alkyl, guanyl, C1-C4 alkylthio, amino, C1-C4 alkylamino, C1-C4 dialkylamino, nitro, C1-C4 alkyleneamino or C2-C4 alkenyleneamino; or
- 5       • a mono- or bi- or tricyclic aromatic or non-aromatic heterocyclic ring containing 0 to 2 heteroatoms per ring provided that at least one heteroatom is present in at least one ring optionally substituted with one or more C1-C4 alkyl, C1-C4 alkylene or C2-C4 alkenylene;
- 10       or an isomer, an enantiomer, a diastereoisomer or a mixture thereof, or a pharmaceutically acceptable salt thereof.
- 33       The composition according to claim 32 which further comprises an anticancer agent.
- 34       The composition according to claim 33 wherein the anticancer agent is  
15       chosen from alkylating agents, platinum derivatives, antibiotic agents, antimicrotubule agents, anthracyclines, group I and II topoisomerases, fluoropyrimidines, cytidine analogues, adenosine analogues, L-asparaginase, hydroxyurea, trans-retinoic acid, suramine, irinotecan, topotecan, dexrazoxane, amifostine, herceptin, oestrogenic and androgenic hormones and antivascular agents.
- 20       35       The composition according to claim 32 used in conjunction with radiation treatment.
- 36       The composition according to claim 33 wherein each of the components is administered simultaneously, separately or sequentially.
- 25       37.       The composition according to claim 35 wherein the compound and the radiation treatment are administered simultaneously, separately or sequentially.
38.       A method of treatment of a cancer in a patient comprising administering to said patient a therapeutically effective amount of a  
30       compound of formula (I):



wherein

n and m are identical or different and are integers 0 or 1;

5

• A represents:

◊ a 5- to 6-membered heterocyclic radical containing a sulfur, oxygen or nitrogen atom;

◊ a phenyl, -NH-phenyl-NH-, -NH-phenyl-CH<sub>2</sub>-NH- or -NH-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-NH-; or

10

◊ a diazine group; and wherein

the heterocyclic, phenyl, -NH-phenyl-NH-, -NH-phenyl-CH<sub>2</sub>-NH-, -NH-CH<sub>2</sub>-phenyl-CH<sub>2</sub>-NH-, and diazine are optionally substituted with one or more radicals chosen from halogen, C1-C4 alkyl, and thio, oxy or amino which are themselves optionally substituted with one or more C1-C4 alkyl;

15

- R<sub>3</sub> and R'<sub>3</sub>, which are identical or different, represent independently of each other hydrogen or C1-C4 alkyl;

- Ar<sub>1</sub> and Ar<sub>2</sub>, which are identical or different, and are independently of each other selected from :

20

- a quinoline optionally substituted with at least
  - a group N(Ra)(Rb) in which Ra and Rb are identical or different, and are independently of each other hydrogen or a C1-C4 alkyl; or
  - a C1-C4 alkyl or alkoxy;

25

- a quinoline possessing a nitrogen atom in quaternary form;
- a benzamidine;
- a pyridine optionally attached at the 4-position or fused with an aryl or heteroaryl group, optionally substituted with a C1-C4 alkyl;

30

- a phenyl optionally substituted with halogen, C1-C4 alkoxy, cyano, carbonylamino optionally substituted with

- one or more C1-C4 alkyl, guanyl, C1-C4 alkylthio, amino, C1-C4 alkylamino, C1-C4 dialkylamino, nitro, C1-C4 alkyleneamino or C2-C4 alkenyleneamino; or
- 5       • a mono- or bi- or tricyclic aromatic or non-aromatic heterocyclic ring containing 0 to 2 heteroatoms per ring provided that at least one heteroatom is present in at least one ring optionally substituted with one or more C1-C4 alkyl, C1-C4 alkylene or C2-C4 alkenylene;
- 10       or an isomer, an enantiomer, a diastereoisomer or a mixture thereof, or a pharmaceutically acceptable salt thereof.